

In the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for selectively eliminating latencies in the exchange of control messages within a network during the re/convergence of the network, said method comprising the steps of:

classifying [[the]] to-be-transmitted control messages into either low-priority control messages or high-priority control messages;

limiting the transmission rate of the low-priority control messages such that when a transmit parameter has a value that reaches a predetermined limit which is set by a transmit hold parameter then the low-priority control messages are not transmitted until the value of the transmit parameter is decremented; and

immediately transmitting the high-priority control messages by removing a restriction imposed on the transmit parameter by the transmit hold parameter, wherein the high-priority control messages [[that]] contain information which will be used by at least one remote bridge to aid in that contributes to the re/convergence of an unstable topology to a stable topology in the network.

2. (Currently Amended) The method of Claim 1, wherein the network is a RSTP-based network, [[and]] the control messages are Bridge Protocol Data Units, the transmit parameter is a txCount parameter, and the transmit hold parameter is a txHoldCount parameter.

Claim 3. (Canceled)

4. (Original) The method of Claim 1, wherein the high-priority control messages are created when a bridge in the network becomes a new root bridge.

5. (Original) The method of Claim 1, wherein the high-priority control messages are created when a bridge in the network has to reroot a port towards a new root bridge.

6. (Original) The method of Claim 1, wherein the high-priority control messages are created when a bridge in the network has to advertise information about a new root bridge to another bridge.

7. (Original) The method of Claim 1, wherein the high-priority control messages are created when a bridge detects a topology change on one of its ports.

Claims 8-14. (Canceled)

15. (Currently Amended) A network comprising:
a plurality of links;

a plurality of bridges coupled to the links, each bridge executing a protocol that selectively eliminates latencies in the exchange of control messages between bridges during the re/convergence of the network by:

classifying [[the]] to-be-transmitted control messages into either low-priority control messages or high-priority control messages;

limiting the transmission rate of the low-priority control messages such that when a transmit parameter has a value that reaches a predetermined limit which is set by a transmit hold parameter then the low-priority control messages are not transmitted until the value of the transmit parameter is decremented; and

immediately transmitting the high-priority control messages by removing a restriction imposed on the transmit parameter by the transmit hold parameter, wherein the high-priority control messages [[that]] contain information which will be used by at least

one remote bridge to aid in that contributes to the re/convergence of an unstable topology to a stable topology in the network.

Claim 16. (Canceled)

17. (Original) The network of Claim 15, wherein the high-priority control messages are created when one of the bridges in the network becomes a new root bridge.

18. (Original) The network of Claim 15, wherein the high-priority control messages are created when one of the bridges in the network has to reroot a port towards a new root bridge.

19. (Original) The network of Claim 15, wherein the high-priority control messages are created when one of the bridges in the network has to advertise information about a new root bridge to another bridge.

20. (Original) The network of Claim 15, wherein the high-priority control messages are created when a bridge detects a topology change on one of its ports.

Claims 21-27 (Canceled)

28. (Original) The network of Claim 15, wherein the network is a RSTP-based network.

29. (Original) The network of Claim 15, wherein the network is a local area network.

30. (Original) The network of Claim 15, wherein the network is a bridged local area network.

31. (Original) The network of Claim 15, wherein the network is a metropolitan area network.

32. (Currently Amended) A device comprising:

a plurality of state machines that selectively eliminates latencies in the exchange of control messages during the re/convergence of a network by:

classifying [[the]] to-be-transmitted control messages into either low-priority control messages or high-priority control messages;

limiting the transmission rate of the low-priority control messages such that when a transmit parameter has a value that reaches a predetermined limit which is set by a transmit hold parameter then the low-priority control messages are not transmitted until the value of the transmit parameter is decremented; and

immediately transmitting the high-priority control messages by removing a restriction imposed on the transmit parameter by the transmit hold parameter, wherein the high-priority control messages [[that]] contain information which will be used by at least one remote bridge to aid in that contributes to the re/convergence of an unstable topology to a stable topology in the network.

33. (Original) The device of Claim 32, wherein said device is at layer 2 of the Open Systems Interconnection reference model.

34. (Original) The device of Claim 32, wherein said device is a bridge, switch or router.

Claims 35-40 (Canceled)